

REMITA DIRECT DEBIT INTEGRATION DOCUMENTATION

Component Name	Remita Direct Debit Integration Documentation
General Description	Outlines Remita's Direct Debit API Integration methods
Target Audience	Integration Partners

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SECTION 1

OVERVIEW

Remita is a multi-bank, modular e-Payments, e-Invoicing, e-Collections, e-Payroll, and e-Schedules delivery solution available on mobile (as an app downloadable to your phone/device from <https://play.google.com/store/apps/details?id=com.systemspecs.remitamobile&hl=en>) and web (www.remita.net) platforms. It remits and collects funds to/from accounts in any Financial Institution via various payment channels (e.g. Bank Branch, Credit/Debit Cards, Internet Banking, Mobile Wallets, etc.).

Remita's direct debit service enables a payer issue a mandate to the biller to debit his/her account through Remita for **a variable amount**. This amount is **restricted to a maximum amount & number of transactions** per calendar month. This means the biller can debit various amounts at a specified number of times from the payer's account so long as the transaction value falls within the maximum amount per month. Here, **the biller decides when to initiate the debit and how much to deduct per transaction**. The biller, however cannot exceed the number of debits or the amount limit mandated by the payer.

This document describes Remita's Direct Debit application programming interface (API) through which third party billers can integrate to the platform to use its various features via the accompanying exposed methods in the API. These, amongst others, include:

1. Direct Debit mandate creation to generate an RRR
2. Direct Debit mandate activation (in conjunction with the banks)
3. Direct Debit Instruction
4. Direct Debit mandate cancellation (stopping a running/active mandate)
5. Direct Debit mandate status enquiry

Full implementation of the API methods above will enable your payers visit your online portal to generate and activate direct debit RRR mandates in your favour. You, the biller, will in turn be able to issue payment instructions on active mandates to debit your customer's account to the value of services/products enjoyed from you within the limits agreed.

The following segments outline the details of our direct debit API methods.

SECTION 2

Setting up a Direct Debit Mandate

The first step to setting up a Direct Debit mandate on Remita is generating a Remita Retrieval Reference (RRR). This is typically done by a payer and activated at the bank. If you have implemented the method below per specifications outlined, your customers will be able to visit your online portal to generate a direct debit mandate RRR.

2.1 Mandate Setup

Fields and Values

Parameter Name	Description	Type
merchantId	Required This is a unique identifier for the Biller	String
serviceTypeId	Required This is a unique identifier for service type receiving the payment	String
requestId	Required This is the Biller Transaction RequestId	String
hash	Required merchantId+serviceTypeId+RequestId+amount+api_key	String
payerName	Required This is the name of the customer to be displayed on the payment page.	String
payerEmail	Required This is the Payer's Email Address	String
payerPhone	Required This is the Payer's Phone Number	Numeric
payerBankCode	Required This is the Payer Bank Code	String

payerAccount	Required This is the Payer Account Number	Numeric
startDate	Required This is when the biller can start to issue direct debit instructions on an active mandate. (Format: DD/MM/YYYY)	Date
endDate	Required This is when the mandate expires. Direct debit instructions are no longer issuable on it. (Format: DD/MM/YYYY)	Date
amt	Required This is the maximum amount you can debit per debit instruction issued.	Numeric
mandatetype	Required This specifies the type of mandate being generated (DD).	String
maxNoOfDebits	Required This is the Maximum Number of Debits permitted in a calendar month.	Numeric

2.2 Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: **merchantId+serviceTypeId+requestId+amt+api_key**

Sample JSON Post For Mandate Setup

WEB URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/setup>

```
{
  "merchantId": "27768931",
  "serviceType": "35126630",
  "hash": "9980c10768896f34d1bb202a45e53879122c01c1e01639d3e5ab90bad63ae37d2774",
  "payerName": "Oshadami Mike",
  "payerEmail": "oshadami@example.com",
  "payerPhone": "08012345678",
```

```
{
  "payerBankCode": "011",
  "payerAccount": "0012618858",
  "requestId": "35457353800",
  "amount": "20000",
  "startDate": "12/02/2017",
  "endDate": "12/12/2017",
  "mandateType": "DD",
  "maxNoOfDebits": "4"
}
```

Sample JSON Response

```
{
  "statusCode": "040",
  "requestId": "1509967248727",
  "mandateId": "290007625795",
  "status": "Initial Request OK"
}
```

SECTION 3

Activating Remita Mandates

After generating a direct debit mandate via your online portal successfully, your payers have to activate their mandates. Your direct debit instructions(s) will become effective only after their mandates have been activated. Your customers need to ensure that the designated paying accounts are always funded to cover the transactions accordingly.

Payers can activate their direct debit mandates in two ways:

- (a) **Manual Bank Activation:** If the payer's funding bank is not integrated to the Remita Platform for One Time Password (OTP) authentication, he/she will need to take the RRR to the nearest bank branch for activation before you are able to issue direct debit instructions on the mandate successfully.
- (b) **Portal Activation:** The payer is able to activate direct debit mandates directly on your portal if his/her funding bank is OTP-integrated to Remita. You can implement the [RequestOTPforMandateActivation](#) and [OTPvalidationForMandateActivation](#) methods as outlined below to enable your payers interface with their banks to authenticate their mandates and activate them via your portal.

3.1 Request OTP for Mandate Activation

Request Headers

Header	Description
MERCHANT_ID	This is the biller identifier
API_KEY	This is your token for authentication to Remita
REQUEST_ID	This uniquely identifies a POST request
REQUEST_TS	This is the request transmission timestamp
API_DETAILS_HASH	This is your SHA512 algorithm hashed value. You are required to hash your payment details on Remita for security. Your key is derived by: <code>api_key+request_id+api_token</code>

Fields and Values

Parameter Name	Description	Type
merchantId	Required This is a unique identifier for the Biller	String
requestId	Required This uniquely identifies the RRR mandate the activation request is being made for.	String

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API

Key: `api_key+request_id+api_token`

Sample JSON Post For Mandate Activation OTP Request

WEBURL: `http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/requestAuthorization`

```
{
  "mandateId": "130014475987",
  "requestId": "1509969600833"
}
```

Sample JSON Response

```
{
  "statusCode": "00",
  "authParams": [
    {
      "description2": "Please specify the last 4 digits of your bank card",
      "param1": "OTP",
      "description1": "Please enter your Bank OTP",
      "param2": "CARD"
    }
  ],
  "requestId": "1509969600833",
  "mandateId": "130014475987",
  "remitaTransRef": "1509969147482",
  "status": "SUCCESS"
}
```


3.2 OTP Validation for Mandate Activation

Request Headers

Header	Description
MERCHANT_ID	This is the biller identifier
API_KEY	This is your token for authentication to Remita
REQUEST_ID	This uniquely identifies a POST request
REQUEST_TS	This is the request transmission timestamp
API_DETAILS_HASH	This is your SHA512 algorithm hashed value. You are required to hash your payment details on Remita for security. Your key is derived by: api_key+request_id+api_token

Fields and Values

Parameter Name	Description	Type
remitaTransRef	Required This uniquely identifies the RRR mandate for which the validation request is required.	String
authParams	Required These are the authentication details required by the bank for payer to supply to activate mandate.	String

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: `api_key+request_id+api_token`

Sample JSON Post For Mandate Activation OTP Request

WEB

URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/validateAuthorization>

```
{
  "remitaTransRef": "1509970187673",
  "authParams": [
    { "param1": "OTP",
      "value": "1234" },
    { "param2": "CARD",
      "value": "1234" }
  ]
}
```

Sample JSON Response

```
{
  "statuscode": "00",
  "mandateId": "170014475989",
  "status": "Mandate Activated Successfully"
}
```

Only valid mandates can be activated on Remita. Valid mandates are those that:

- Carry valid RRR (Remita Retrieval Reference) numbers originating from Remita
- Their end dates do not occur on or before the date they are activated (these are called expired mandates)
- Activation is being done with the payer bank

The following section describes the method for enquiring mandate status.

SECTION 4

Mandate Status Enquiry

You can check the status of a mandate to check if activation has been completed by the bank. The status of the mandate is determined by the `isActive` field. For Activated mandates the value of `isActive` is `'true'` while for inactive mandates `isActive` has a `'false'` value.

4.1 Mandate Status

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: `requestId+api_key+merchantId`

Fields and Values

Parameter Name	Description	Type
merchantId	Required This uniquely identifies the RRR mandate for which the validation request is required.	String
serviceTypeId	Required This identifies the product/service whose mandate status is being requested.	String
requestId	Required A unique identifier for the mandate status request	

Sample JSON GET For Mandate Transaction History Request

WEB

URL: `http://www.remitademo.net/remita/ecom/mandate/{merchantId}/{requestId}/{hash}/status.reg`

```
var merchantId = "27768931";
var serviceTypeId = "35126630";

var apiKey = "Q1dHREVNTzEyMzQ1fENXR0RFTU8=";
var requestId = "1509978654278";

var hash = CryptoJS.SHA512(requestId + apiKey + merchantId);
```

Sample JSON Response

```
{"endDate":"12/12/2017",  
  "requestId":"1509978654278",  
  "mandateId":"340014476098",  
  "registrationDate":"06/11/2017",  
  "isActive":false,  
  "activationDate":"06/11/2017",  
  "startDate":"12/11/2017"}
```

SECTION 5

Mandate Transaction History

You can enquire after the transactions that have resulted from the direct debit instructions issued on a mandate to check that the payer account has been debited, querying the status of a debit transaction to confirm that the funds have been debited or settled accordingly.

5.1 Mandate Transaction History

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: `mandateId+merchantId+requestId+api_key`

Fields and Values

Parameter Name	Description	Type
merchantId	Required This uniquely identifies the Biller	String
mandateId	Required This uniquely identifies the mandate (otherwise known as RRR)	String
hash	A valid payment request hash is generated by concatenating the following payment details and hashed using SHA512 algorithm and the assigned API Key: <code>mandateId+merchantId+requestId+api_key</code>	String
requestId	A unique identifier for the mandate transaction history request	String

Sample JSON Post For Mandate Transaction History Request

WEB

URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/payment/history>

```
{
  "mandateId": "330007655497",
  "requestId": "112233445566",
  "hash": "536bf6fa8bef46982021c753f21356a5bc7a5fd78e2e68d2d166d88e654b40f19b1283e8f8b6a057e26d8074d364f8c518a8c2061eb58d608d541189b34d39f3",
  "merchantId": "27768931"
}
```

Sample JSON Response

```
{
  "statusCode": "00",
  "data": {
    "data": {
      "totalTransactionCount": 3,
      "totalAmount": 7500.0,
      "paymentDetails": [
        {
          "amount": "2500",
          "lastStatusUpdateTime": "2017-11-07 15:06:59",
          "status": "Awaiting Debit",
          "statusCode": "070",
          "RRR": "200007655537",
          "transactionRef": "7655537"
        },
        {
          "amount": "2500",
          "lastStatusUpdateTime": "2017-11-07 15:06:59",
          "status": "Awaiting Debit",
          "statusCode": "070",
          "RRR": "220007655538",
          "transactionRef": "7655538"
        },
        {
          "amount": "2500",
          "lastStatusUpdateTime": "2017-11-07 16:06:59",
          "status": "Awaiting Debit",
          "statusCode": "070",
          "RRR": "180007655555",
          "transactionRef": "7655555"
        }
      ]
    },
    "requestId": "112233445566",
    "mandateId": "330007655497",
    "status": "RECORD FOUND"
  }
}
```

SECTION 6

Issuing & Cancelling Direct Debit Instructions

Once your payer mandates are activated (you can independently verify this using the `MandateStatusEnquiry` method described at Section 4 above), you can, as a biller, issue instructions to debit your payers' accounts within the rules setup on the concerned mandates. You can also cancel already issued instructions *provided the payer's account has NOT yet been debited*. The methods below outline the parameters required for these.

6.1 Issue Direct Debit Instruction

The payment request will be sent via the JSON POST as shown below. Remita will facilitate payment of the specified amounts through the indicated service types into the corresponding collecting accounts as applicable.

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: `merchantId+serviceTypeId+requestId+totalAmount+api_key`

Sample JSON Post For Direct Debit Instruction

WEB URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/payment/send>

```
{
  "merchantId": "27768931",
  "serviceTypeId": "35126630",
  "requestId": "6973737332983333",
  "hash": "9980c10768896f34d1bb202a45e53879122c01c1e01639d3e5ab90bad63ae37d2774",
  "totalAmount": "5000",
  "mandateId": "290007625795",
  "fundingAccount": "6973738333",
  "fundingBankCode": "011",
}
```

Sample JSON Response

```
{
  "mandateId": "290007625795",
  "rrr": "40007613498",
  "transactionRef": "290007625795",
  "statusCode": "01",
  "status": "Approved"
}
```

6.2 Cancel Direct Debit Instruction

You can stop or cancel a direct debit payment instruction via this API.

Fields and Values

Parameter Name	Description	Type
merchantId	Required This is a unique identifier of merchants	String
mandateId	Required This is a Mandate Id	Numeric
requestId	Required This is the Merchant Transaction RequestId used in the mandate setup.	String
transactionRef	Required This is the Transaction Reference returned by Remita.	String
hash	Required transactionRef+merchantId+requestId+api_key	String

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: **transactionRef+merchantId+requestId+api_key**

Sample JSON Post For Stop Mandate

WEB URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/payment/stop>

```
{
  "merchantId": "27768931",
  "mandateId": "290007625795",
  "hash": "9980c10768896f34d1bb202a45e53879122c01c1e01639d3e5ab90bad63ae37d2774",
  "requestId": "35457353800",
  "transactionRef": "35457353800",
}
```


Sample JSON Response

```
{  
  "statuscode": "00",  
  "mandateId": "290007625795",  
  "status": "Completed Succesfully"  
}
```

SECTION 7

Mandate Debit Status

You can use Mandate debit status API to check status of debit instructions.

Fields and Values

Parameter Name	Description	Type
merchantId	Required This is a unique identifier of merchants	String
mandateId	Required This is a Mandate Id	Numeric
requestId	Required This is the Merchant Transaction RequestId used in the mandate setup.	String
hash	Required transactionRef+merchantId+requestId+api_key	String

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: **mandateId+merchantId+requestId+api_key**

Sample JSON Post For Stop Mandate

WEB URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/payment/status>

```
{
  "merchantId": "27768931",
  "mandateId": "290007625795",
  "hash": "9980c10768896f34d1bb202a45e53879122c01c1e01639d3e5ab90bad63ae37d2774",
  "requestId": "35457353800",
}
```

Sample JSON Response

```
jsonp ({ "statuscode": "072",  
  "amount": "1000",  
  "requestId": "1524034885236",  
  "mandateId": "200007681305",  
  "lastStatusUpdateTime": "2018-04-17 08:06:59",  
  "status": "Pending Credit" })
```

SECTION 8

Remita Mandate Notifications

Remita notifies you (the biller/merchant) when:

1. Mandates are activated in your favour and;
2. Your payer accounts get debited consequent to you issuing a direct debit instruction.

This ensures that you are kept up-to-date on your anticipated inflows accordingly.

7.1 Activation Notification

```
{ "notificationType":"ACTIVATION",
  "lineItems":[
    {
      "mandateId":" 340007627867",
      "activationDate":"19/01/2015",
      "requestId":"23457885",
      "startDate":"12/02/2015",
      "endDate":"12/02/2016",
      "amount":"20000"
    },
    {
      "mandateId":" 347307627867",
      "activationDate":"19/01/2015",
      "requestId":"646743367",
      "startDate":"05/02/2015",
      "endDate":"12/02/2015",
      "amount":"50000"
    }
  ]
}
```

7.2 Debit Notification

```
{
  "notificationType": "DEBIT",
  "lineItems": [
    {
      "mandateId": "23453443",
      "debitDate": "03/05/2017",
      "requestId": "09432223433",
      "amount": "20000"
    }
  ]
}
```

SECTION 8

Stopping Mandates on Remita

Only active mandates can be stopped on Remita. A mandate is active when it has been activated and already running on the platform. Remita automatically stops expired mandates on their specified end dates. However, a mandate can also be stopped on the platform before its end date.

8.1 Stop Mandate

You can stop or deactivate mandates via this API.

Fields and Values

Parameter Name	Description	Type
merchantId	Required This is a unique identifier of merchants	String
mandateId	Required This is a Mandate Id	Numeric
requestId	Required This is the Merchant Transaction RequestId used in the mandate setup.	String
hash	Required mandateId+merchantId+requestId+api_key	String

Generating Request Hash

For security reasons you are required to hash your payment details with your API Key. Upon registration on Remita you will be given an API Key which should be kept secret. A valid payment request hash is generated by concatenating the following payment details and hashed using **SHA512 algorithm** and the assigned API Key: `mandateId+merchantId+requestId+api_key`

Sample JSON Post For Stop Mandate

WEB URL: <http://www.remitademo.net/remita/exapp/api/v1/send/api/echannelsvc/echannel/mandate/stop>

```
{  
  "merchantId":"27768931",  
  "mandateId":"290007625795",  
  "hash":"9980c10768896f34d1bb202a45e53879122c01c1e01639d3e5ab90bad63ae37d2774",  
  "requestId":"35457353800",  
}
```

Sample JSON Response

```
{  
  "statusCode":"00",  
  "mandateId":"290007625795",  
  "status":"Completed Successfully"  
}
```

SECTION 9

APPENDIX

9.1 Status/ErrorCodes

Code	Description
069	New Transaction
070	Awaiting Debit
071	Undergoing Bank Processing
072	Pending Credit
073	Invalid Mandate Type
074	No Available Record
00	Transaction Completed Successfully (Record Found)
01	Approved (Direct Debit Instruction Successful)
075	Mandate Already Active
066	Mandate Deactivated
067	Only Direct Debit Mandate Allowed
013	Invalid Hash Value
061	Invalid Mandate
062	Mandate Not Due
063	Expired Mandate
020	Authentication Error (Invalid User Authentication)
040	Initial Request OK (Mandate Setup Completed Successfully)

9.2 Bank Codes

Bank Code	Bank Name
023	CITIBANK NIG LTD
214	FIRST CITY MONUMENT BANK PLC
011	FIRST BANK OF NIGERIA PLC
035	WEMA BANK PLC
039	STANBIC IBTC BANK PLC
033	UBA PLC
101	PROVIDUS BANK PLC
044	ACCESS BANK PLC
050	ECOBANK NIGERIA PLC
057	ZENITH BANK PLC
063	DIAMOND BANK PLC
076	SKYE BANK PLC
082	KEYSTONE BANK
232	STERLING BANK PLC
032	UNION BANK OF NIGERIA PLC
030	HERITAGE BANK
301	JAIZ BANK PLC
058	GUARANTY TRUST BANK PLC
070	FIDELITY BANK PLC
068	STANDARD CHARTERED BANK NIGERIA LTD
100	SUNTRUST BANK NIG LTD
215	UNITY BANK PLC
068	STANDARD CHARTERED BANK NIGERIA LTD
100	SUNTRUST BANK NIG LTD
215	UNITY BANK PLC